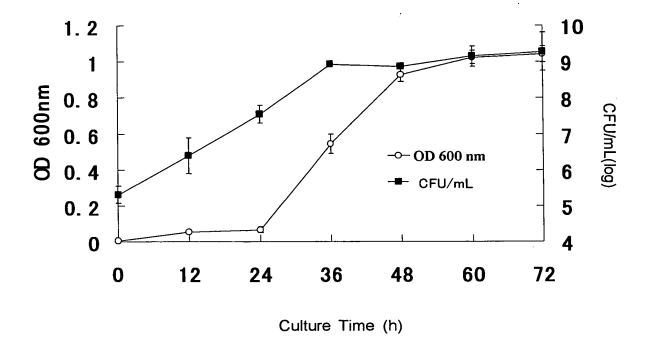
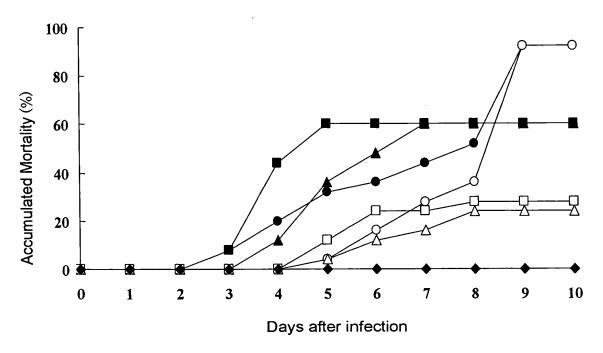
Fig. 1



⁻ Fig. 2



• : Logarithmic growth phase (36 h, 10^{9,5} UFC/ml)

○ : Logarithmic growth phase (36 h, 10^{8,5} UFC/ml)

▲ : Stationary phase (48 h, 10^{9,9} UFC/ml)

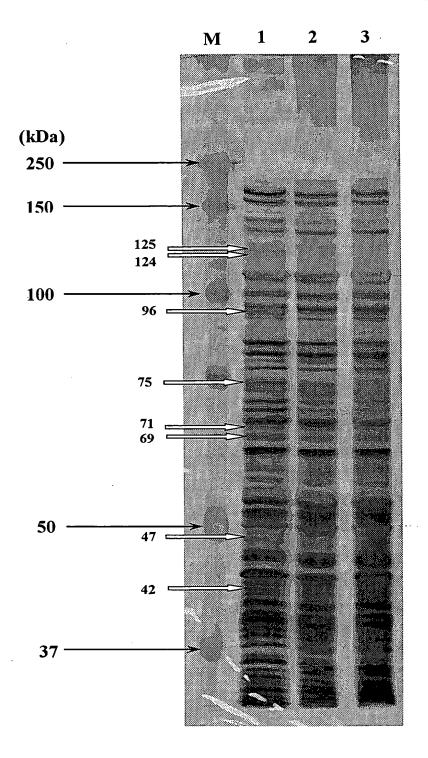
 \triangle : Stationary phase (48 h, 10^{8,9} UFC/ml)

■ : Stationary phase (72 h, 10^{10,2} UFC/ml)

☐ : Stationary phase (72 h, 10⁹ UFC/ml)

◆ : Control group (Non-infection group)

Fig. 3



M: Molecular weight marker

Lane 1: Logarithmic growth phase (36 h)

Lane 2: Stationary phase (48 h)

Lane 3: Stationary phase (72 h)

Arrow: Bands specific to logarithmic growth phase

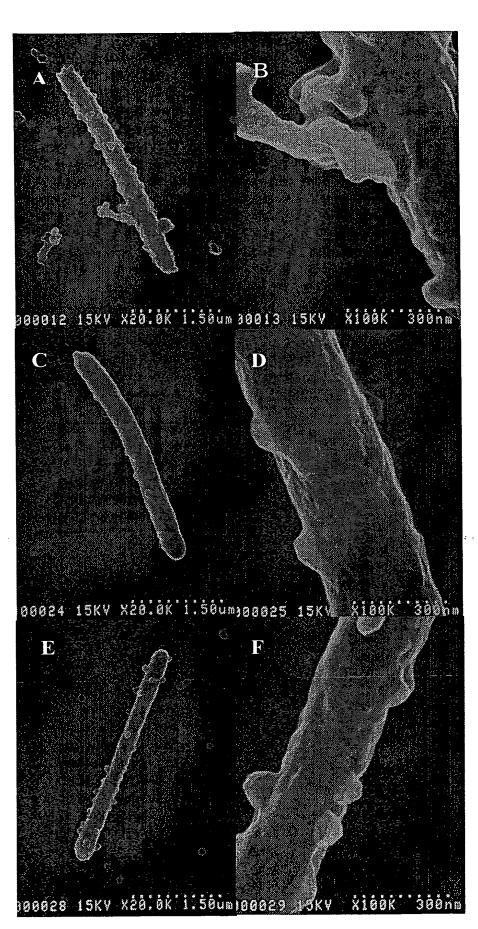
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Fig. 4

Logarithmic growth phase (36 h)

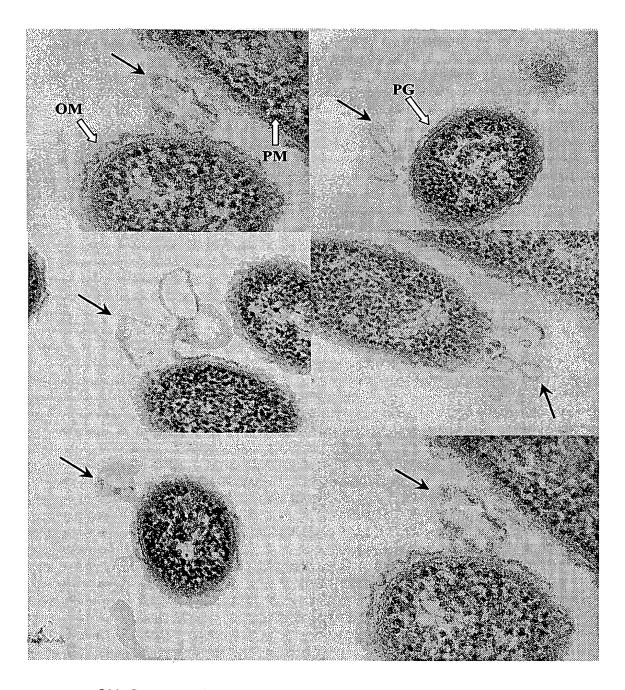
Stationary phase (48 h)

Stationary phase (72 h)



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Fig. 5



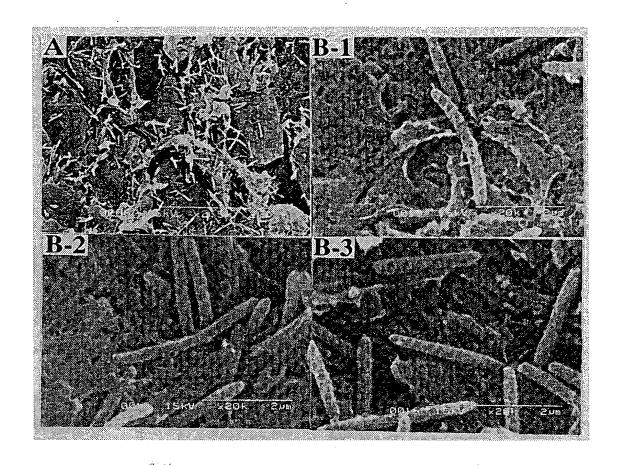
OM: Outer membrane

PG: Peptidoglycan membrane

PX: Plasma membrane

Arrow: Projections on the cell surface

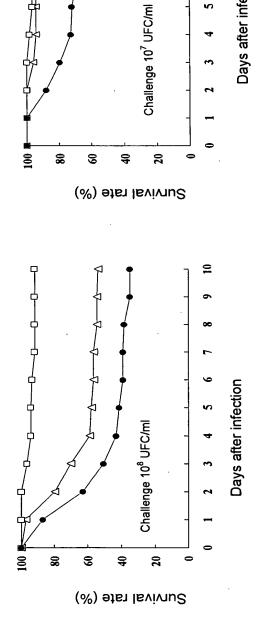
Fig. 6



A = Magnification $\times 2.500$ B = Magnification $\times 20.000$ Days after infection

Challenge 1 (3 days after vaccine administration)

Fig. 7

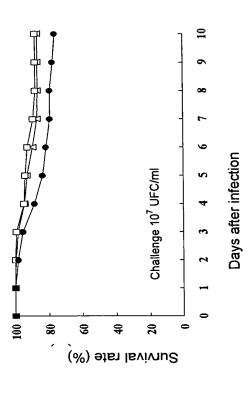


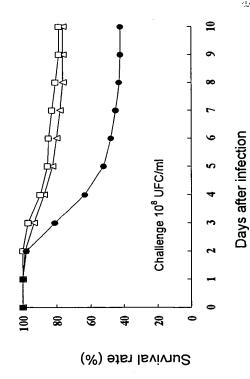
 \triangle : Everyday administration

 $\square:$ 5 days' administration in 2 weeks

Control group

Challenge 2 (7 weeks after vaccine administration)



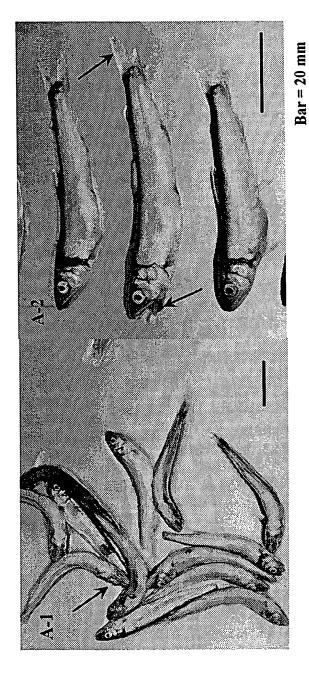


 \triangle : Everyday administration

☐: 5 days' administration in 2 weeks

: Control group





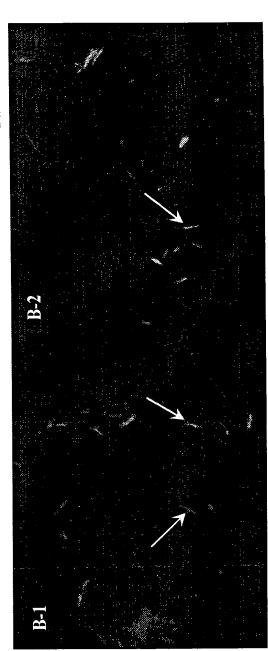
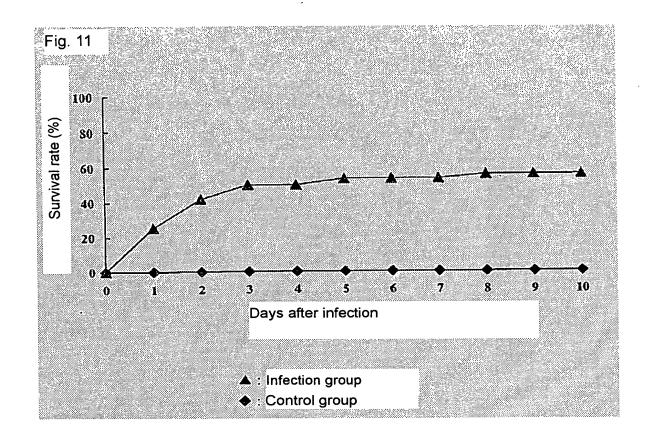
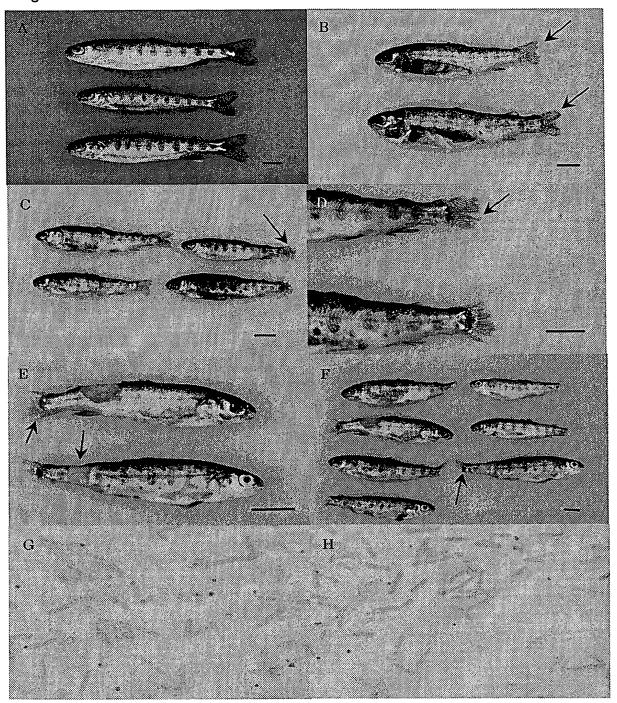


Fig. 10



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Fig. 12



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